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ing both the arc and the rate; the former to such a very small extent as to be immaterial; while the latter is under the control of the screw for adjusting the length of the pendulum.

But I suspect there is a constant, though very slow diminution of the corrected rate; whether due to the gradual consumption of the terminals, or to a gradual compression of imperfect springs, I am at present unable to say: but whatever owing to it is under control; you have only to advance the joints of the screws an exceedingly minute quantity.

The battery being only in action at the instant of contact there is not much consumption of materials. I find a single Daniell's cell exposing 3 square inches of zinc surface, and converting 15 grains into sulphate per hour, is quite sufficient to work the whole apparatus.

The battery is only put into operation when the equatoreal is in use; and at first I found some difficulty in having the battery always ready, at a moment's notice, at uncertain and long-separated intervals; also in keeping the fingers free from acid, &c. But these difficulties have been obviated by having the zinc plate of considerable length, and held in a kind of vice sliding on a rod, like a retort stand, which forms part of the circuit; thus the strength of the battery can be regulated, the same zinc will last a very long time, and there are no connexions to be made and unmade.

The porous pot, when not in use, is kept suspended by percha cords in a very large vessel of dilute acid, whence it can be filled, and emptied without touching it, the result of the whole matter being that in ten seconds I can without fail put the entire apparatus into working order.

Sherrington House, Bray, Co. Wicklow,
January 8, 1873.

Meteor observed at Mauritius.
By Mr. Wright.

(*Communicated by Mr. Meldrum, of the Mauritius Observatory.*)

On Thursday evening last, about 7 o'clock, I saw the most beautiful meteor fall that I ever remember observing in my life. My face was turned in the opposite direction, but an unusually brilliant and sudden flash of light, above the brightness of the moonshine, caused me to turn suddenly round in the direction the effulgence came from, and I saw a very large meteor majestically falling through the distance seemingly about 8 or 10 yards. I am not much of an astronomer, but I think it must have fallen (apparently) from some point in *Aquarius*. What particularly struck me in its appearance was, that it was beautifully distinct, and perfectly round as the full moon, but seemingly about the $\frac{1}{8}$th of a diameter larger. I ought, perhaps, rather to compare it to the moon at the end of her first quarter; for the lower quarter of

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its disk only was luminous and brilliant, while the upper three quarters emitted no luminosity, being of a dull dusky stone-brown colour. Here the circular outline was perfectly distinct, while the brightness of the lower limb took away all distinctness of outline there, making it appear slightly more prominent, besides throwing beyond the outline of the meteor itself a beautiful soft, steady, very bright radiance of a bluish white tint, which illuminated momentarily the whole heavens. It was observed by other people; and one person described to me having seen a similar meteor fall about this time last year, the disk appearing about the size of a saucer, entirely luminous; but then no moon was shining.

A Fireball in Scotland. By H. D. Penny, Esq.

(*From a Letter to Mr. Dunkin.*)

Though I reported that we had thunder and lightning on Sabbath evening last, I had grave doubts as to the propriety of doing so, and since that time I have now reason to change my opinion.

I was coming up the street at half past 5 P.M. on that day, when without any warning I seemed enveloped in flame; on looking to the sky it seemed illuminated, and continued so for two or three seconds so brightly that I had no difficulty in seeing the smallest stone on the ground. For a second or so, the illumination waned, and then it shone for a second brighter than before. I hurried home to see the exact time of the circumstance, and being about 100 yards or so from the house, I heard when coming at the gate, a low rumbling noise as of distant thunder away to the south-west. I then concluded that it was thunder, and remained outside for half-an-hour in the expectation of hearing more, but in vain, as thunder is rather uncommon in this quarter at this season.

Though the sounds heard appeared like thunder, I could not reconcile the appearance of the illumination with a flash of lightning,—it remained so long visible. On making inquiries next day, I found that an uncommon meteor had been seen, and having learned that a person residing in the high lands about five miles to the south of this had been an eye-witness of it, I called upon him last night, and had the following particulars:—

On his way home from Nairn, and at the same hour as mentioned, he saw a large ball of fire, about the size of the full moon, coming up from the east-south-east, about twenty degrees from the horizon, and gliding along comparatively slowly, so that he could distinctly discern it. The ball was of the colour of intensely heated iron, and had a tail attached to it. For the two or three seconds it remained in sight the sky was so lighted up that he could have picked a pin from off the ground. It then seemed to him as if to descend behind some of the hills to the

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